OFFICE OF THE PUBLICITY OFFICER TO GOVERNMENT.

Dated Bangalore, 30th March 1925.

PRESS COMMUNIQUE.

Having in view the unprecedented floods that occurred in the Cauvery in July last, the Special Officer and Secretary to Government, Krishnarajasagara Works, submitted in December last proposals relating to—

(1) the revision of the maximum flood discharge of the river at Krishnarajasagara, and

(2) the stage at which the works may be stopped for the present after June of 1925, by which time diversion of the floods to the permanent waste weir is expected to be completed.

The revised estimates for the Dam are also before Government for orders.

Government appointed a Special Committee to consider and submit recommendations to them on the proposals made by the Special Officer as well as on the revised estimates pending before Government. The Committee have now submitted their report to Government, which is published herewith for general information.

R. RANGA RAO,
Publicity Officer to Government.

REPORT OF THE COMMITTEE OF ENGINEERS CONSTITUTED FOR THE CONSIDERATION OF CERTAIN MATTERS RELATING TO THE KRISHNARAJASAGARA DAM WORKS, DATED 14TH MARCH 1925.

As definite decisions had to be arrived at on several important points relating to the Krishnarajasagara Dam Works, Government proposed to appoint in January last a Committee of technical experts for considering these matters and for advising Government on the same. Sir Frederick St. John Gebbie, Consulting Engineer to the Government of India, was requested to be Member and Chairman of this Committee, Messrs. Karpur Shrinivasa Rao and B. Subba Rao being the other two members.

The Government of India who were addressed through the Residency having agreed to depute Sir Frederick St. John Gebbie for the purpose and other members having consented to serve on the Committee, the Committee met on the 13th and 14th March 1925.

The terms of reference to the Committee are :—

A. In view of the unprecedented floods of July last, for what maximum discharge should the surplusing arrangements of the Krishnarajasagara works be designed?

B. In what stage should the reservoir works be stopped till need arises for larger storage for irrigation so that unproductive capital exependiture might be postponed till the canal works are taken up and have made sufficient progress?

C. What maximum storage may ultimately be allowed in the reservoir consistent with the safety of the dam as designed?

D. Whether the revised estimates submitted for the reservoir works by the Technical Officers are in order and may be sanctioned?

PRELIMINARY.

Full and detailed notes explaining all the points relating to the above terms of reference together with the necessary plans, sections, calculations, estimates, etc., were forwarded for information and previous study to each of the members of the Committee. The points relating to the terms of reference detailed in the above notes were fully discussed and the conclusions arrived at are briefly noted below with the necessary explanatory remarks :—

A.

In view of the unprecedented floods of July last, for what maximum discharge should the surplusing arrangements of the Krishnarajasagara Works be designed?

We have examined the calculations furnished to us relating to the unprecedented flood discharge of July 1924 and we think that the provision for a discharge of 350,000 cusecs proposed by the Special Officer, is quite suitable and ample, this being about 20 per cent in excess of the discharge of last year which is the highest during the past 100 years.

We have gone carefully into the question of the capacity of the surplusing works as set forth in the enclosed tabular statement and find that the surplusing works provided, *viz.*, the open weir of 1,200 feet with its crest at 106 above bed and 16 sluices, each 10′ x 20′, 80′ above bed together are capable of discharging ultimately 344,527 cusecs with the maximum water level at 124 feet excluding 10,500 cusecs through the three scouring sluices at 50 level which may also be opened as an emergent measure when floods exceed the limit noted above.

We think therefore that the surplusing works have ample capacity and that this capacity should be utilised by raising the masonry of the dam sufficiently high. The Special Officer points out that an additional weir length of about 800 feet can be arranged on the North

Bank at a cost of about Rs. 4 to 5 lakhs. We agree with him in thinking that there is room for future enlargement of the weir works but do not think it necessary to provide for it in the estimates.

(B)

In what stage should the reservoir works be stopped till need arises for a larger storage for irrigation so that unproductive capital expenditure might be postponed till the canal works are taken up and have made sufficient progress?

Our recommendations in regard to the surplusing works go towards deciding this question. We think that it is necessary to raise the masonry to 128′ above bed level so as to have at least a margin of 4 feet above maximum flood level, thus leaving only 2 feet below the final top level of the dam, *viz.*, 130 feet, the cost for this top portion being about rupees 2 lakhs. It may appear that this expenditure could be postponed for the present but we think it undesirable to do so. The tram lines, mortar mills and other machinery are all now in position and we have no doubt that it will cost a great deal more than the interest charges on Rs. 2 lakhs to carry out later on this top masonry if postponed. We therefore recommend the completion of the work proposed in the estimate amounting to Rs. 217·18 lakhs bringing the top of the dam to 130 above bed once for all.

(C)

What maximum storage may ultimately be allowed in the reservoir consistent with the safety of the dam as designed?

We have examined the profile of the dam for storing water up to 124′ above bed. Our attention was drawn by the Special Officer to certain Press criticisms and the letters of Mr. O. T. Dalal stating that a higher storage than 118 should not be allowed. We have also considered the effect of the scours in portions of the rear face of the dam due to the overflow of water in the central gap. Sir Frederick St. John Gebbie, Chairman of this Committee, while inspecting these scours in September 1923 found by actual measurement that in only one case the depth of the scour was 3½′ and in other places the depth varied from 1½′ to 3′. But the dam as actually constructed has an extra thickness of 2 to 3 feet in the river bed over and above what the designed profile provides, and we have no hesitation in stating that the effect of these scours which all lie in the zone of extra thickness have in no way weakened the dam.

We find that the profile adopted satisfies fully the conditions of stability and stress required for a storage of 124′ and these compare very favourably with the corresponding provisions made for high dams in the Bombay Presidency, *viz.*, Bhatgar Dam and Bhandardara Dam, which are two of the highest in India. Also, the mortar used in the Krishnarajasagara Dam as indicated by the results of continuous tests, is of superior quality and the masonry is very sound.

We have considered Mr. Dalal's letters against a storage of 124′. He does not base his arguments on stress and stability calculations. If he had translated his objections into figures showing stability and stress and had compared them with the same figures for storage and similar figures for other Indian Dams, he would have found no room for any anxiety in the matter.

(D)

Whether the revised estimates submitted for the reservoir works by the Technical Officers are in order and may be sanctioned?

We have gone through the revised estimates placed before us. We recommend that the first set of revised estimates amounting to Rs. 217·18 lakhs net under direct charges providing for raising masonry to 130 while leaving the weir at 106 may be sanctioned.

We have also examined the second set of estimates for the ultimate stage of the reservoir works amounting to Rs. 251·32 lakhs under direct charges and the provision seems reasonable with the exception of Rs. 4 lakhs for a weir on the North Bank which may be omitted.

The following works estimated to cost about Rs. 30 lakhs and included in the second set of estimates may be postponed :—

(1) Provision of automatic gates to raise storage to 124′.
(2) Payment of compensation for land above 106.
(3) Constructing the parapet wall on the top with approach works.

As the extra works of this estimate not included in the estimate one noted above would naturally be postponed for several years till the High Level Canal and tunnel works have made fair progress, estimates for such extra works will have to be revised according to the conditions obtaining at such future date.

Summarising, our recommendations are :—

(1) That the provision for a maximum flood discharge of 350,000 cusecs is suitable and sufficient.

(2) That the dam masonry be raised to 130′ as proposed by the Special Officer and only works relating to automatic shutters, parapet wall and compensation for land above 106 may be postponed.

(3) That the profile of the dam, notwithstanding the rear scours which have been effectively repaired has ample strength to store water up to 124′ above bed.

(4) That the revised estimates amounting to Rs. 217·18 lakhs providing for all works necessary to complete masonry up to 130 level is in order and may be sanctioned.

(SD.) F. ST. J. GEBBIE,
Chairman.

Member—KARPUR SHRINIVASA RAO,
14-3-25.

Member—B. SUBBA RAO,
14-3-25.

OFFICE OF THE DIRECTOR, OF INDUSTRIES AND COMMERCE IN MYSORE, BANGALORE.

Notification.

Attention of the public is drawn to the Notification dated 26th March 1925, published in the Gazette, dated the 26th March 1925, calling for applications for the award of Technical Scholarships tenable at the 'Victoria Jubilee Technical Institute and Sir J. J. School of arts, Bombay, and the Government School of Arts, Madras.

The applications should reach this office on or before the 1st May 1925.

P. G. D'SOUZA,
Director.

GOVERNMENT CENTRAL BOOK DEPOT, BANGALORE CITY.

Notice.

Copies of the following books are available for sale at the prices noted against each:—

	Rs.	a.	p.
Copyright Act XX of 1847, English	0	1	4
Succession Certificate Regulation, VII of 1901, English ...	0	1	4

Postage extra

K. SRINIVASARAGHAVACHAR,
Curator.

OFFICE OF THE INSPECTRESS OF GIRLS' SCHOOLS IN MYSORE, BANGALORE.

Agenda to the Notification regarding the Music Examination published in part IV, of the Mysore Gazette, dated 26th February 1925.

In continuation of the above notification it is hereby informed that a new subject, *viz.* "TESTING THE WORK OF COMPOSITION OF MUSICAL SONGS BY THE COMPETITORS" is added on the existing number of subjects *re* music examination. The competitors for the said examination are requested to bring with them at the time of examination in original in writing, songs composed by them, if any, so that the work may be tested according to its merit.

LIST OF COMMITTEE MEMBERS OF THE KANNADA INCOMPLETE GIRLS' SCHOOL, HOLALKERE.

1. Taluk Amildar (President).
2. Taluk Sheristadar.
3. Taluk Police Inspector.
4. Excise Inspector.
5. Sub-Assistant Surgeon, Local Fund Dispensary.
6. Head Master, Middle School, Holalkere (Secretary).
7. Mr. H. V. Gopaliah, Shanbhogue.
8. Mr. G. Gopalaiah, Shanbhogue.
9. ,, Nagarajappa, Landlord.
10. ,, G. M. Mahadevaiah.
11. ,, Veebhuti Hutchaveeraiah.
12. ,, Anantha Halappa.
13. ,, Anantha Sidaramasetty.
14. ,, Sheik Imam Sab.
15. ,, Head Master, Girls' School.

SRIRANGAMMA,
Inspectress of Girls' Schools.